Nottawasaga Valley Conservation Authority

PROCEDURAL GUIDELINE FOR THE PLACEMENT OF LARGE QUANTITIES OF FILL

Effective: October 28, 2011

Nottawasaga Valley Conservation Authority
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Procedures for Receiving & Processing Applications to Place Large Quantities of Fill

This procedural guideline only applies to those lands that are situated within the regulatory jurisdiction of the Nottawasaga Valley Conservation Authority, as specified within the *Conservation Authorities Act* and Ontario Regulation 172/06 (Regulation of Development, Interference with Wetlands and Alterations to Shorelines and Watercourses).

- **Large fill sites are classified by the Authority as those sites that involve the importation of 250 cubic metres of fill or more. Smaller quantities of fill may be considered "large fill sites" subject to Municipal input and approval of the NVCA Director of Planning and the CAO/Secretary-Treasurer.**

General Restrictions

In general, large fill sites should be directed away from areas subject to Nottawasaga Valley Conservation Authority Ontario Regulation 172/06.

Furthermore, to ensure the protection of environmentally significant areas including landforms, and to maintain the function of natural hazard lands, in general large fill sites are prohibited in:

- Watercourses;
- Wetlands;
- Adjacent lands where fill may cause impacts (e.g. those lands within close proximity to wetlands);
- Areas of Natural and Scientific Interests (ANSIs);
- Hazard lands associated with flooding, erosion, steep slopes;
- Key natural heritage features such as significant valley lands;
- Dynamic beaches; and
- Natural Core Area and Landform Conservation Areas 1 and 2 as defined by the Oak Ridges Moraine Conservation Plan.

Application/Permit Requirements

1. Upon receipt of an application submitted under Ontario Regulation 172/06 for development activities associated with the placement of large quantities of fill, Authority staff will require a complete application which includes the submission of all necessary supporting documentation. Supporting documentation will include:

    - An NVCA permit application, which may be submitted by an authorized agent acting on behalf of the property owner provided that the authorized agent has been granted permission in writing by the property owner (copy of permission shall be provided with application). The permit will not be issued until it is signed (both pages) by the registered property owner(s) and/or principal of the numbered company;
    - Four copies of a plan of survey prepared by a certified Ontario Land Surveyor (OLS) or qualified professional showing the subject property

and the specific location(s) of the subject property where development activities are being proposed. The certified plan shall show a minimum of the following:

a) Key map;
b) Confirmation that it is drawn to scale;
c) Location of the subject property including property lines, north arrow and nearest roadways/intersections;
d) Location, dimensions and use of existing buildings or structures;
e) Location, dimensions and use of proposed buildings or structures;
f) Existing topography;
g) Elevations and proposed elevations (pre- and post-fill elevations) within and adjacent to the area where development (fill) is being proposed at 0.5 metre contour intervals using a geodetic datum;
h) The plan must show the subject property and each fill envelope being proposed;
i) Multiple cross sections, to the satisfaction of NVCA engineering staff, through each fill area;
j) Drainage patterns pre- and post-development that verifies the fill will not alter drainage patterns and volumes in such a way as to have an adverse effect on downstream or upstream properties;
k) Total fill quantity indicated in cubic metres;
l) A specified limit on the depth of fill material is indicated;
m) Location and dimensions of all temporary stockpiles;
n) Location and dimensions of all staging areas and access routes;
o) Start and finish dates of project including sequencing and re-vegetation;
p) Location of natural and environmentally sensitive features that may include, but not be limited to the following: floodplain, watercourses (e.g. ditches, streams, rivers, lakes), wetlands, valleys/valley walls, hydrogeologically sensitive features (e.g. springs, seeps, etc), top of bank or stable slope line (whichever is greater) and the required setbacks to these features;
q) Other known site features and structures such as access roads, culverts, utilities, poles, pavement, curbs; and
r) The Regulatory limit as prescribed by Ontario Regulation 172/06.

- Sediment and erosion control plan;
- A restoration plan including details for site stabilization measures such as topsoil, seed, sod, hydroseed and associated timing, etc.;
- Hydraulic Analysis (for those areas frequently flooded);
- A soil report prepared by a qualified environmental/geotechnical engineer and/or Professional Geoscientist for each location where fill is being imported from. The report(s) must show that the control of pollution and conservation of land will not be adversely affected by the fill. The soil report(s) shall consist of a minimum of the following:

a) Municipal address of the site(s) of soil origin;

b) A description of the origin(s) of the fill and its history, past and present uses of the land including any processes involved in the generation of the fill and a completed questionnaire to identify if there are any potential concerns with fill quality and possible contamination;
c) Verification that the fill material is inert, based on distributed samples across the site with a focus in areas of highest risk. A detailed description of the sampling procedure and rationale shall be provided; and
d) Verification that the fill material is in conformity with the pertinent Ministry of Environment guidelines.

Upon receipt of the soils report, the Authority reserves the right to retain a qualified peer consultant, at the applicant's expense, to review the report to determine if it satisfactorily ensures that the fill material is inert, meeting the MOE soil quality requirements.

Inert is defined as: meeting either Table 1 or Table 2 Site Conditions Standards referenced in the *Environmental Protection Act*.

- Where site specific conditions/concerns are warranted (e.g. areas within close proximity to the floodplain, erosion hazards or other areas of key natural heritage and hydrologic feature(s)), the Authority may require that an environmental impact study (EIS) and/or hydrological study be completed verifying that the proposed fill will not have an adverse impact on natural resources and will not create or worsen natural hazards. The study shall assess potential impacts and provide recommendations on the appropriateness of placing fill on the subject lands and any setbacks and/or mitigation measures to the satisfaction of the NVCA. Once an application is submitted by the authorized agent/owner, the Authority will review the proposal and, if deemed necessary, a Terms of Reference will be provided outlining the requirements of the study. It will be the responsibility of the authorized agent/owner to pay for and complete the EIS. Site specific issues may include, but not be limited to, proximity to or presence of one or more of the following:

    a) Hydrogeologically sensitive features (e.g. significant discharge areas, springs, seeps);
    b) Significant groundwater recharge areas, or highly vulnerable aquifers;
    c) High water table;
    d) Environmentally sensitive features;
    e) Natural heritage features.

  The Authority may require additional studies and reports as deemed necessary to ensure that the proposed fill site will not result in an adverse impact on the control of flooding, erosion, dynamic beaches, pollution or the conservation of land. The NVCA may also require a final grade survey or inspection report from a qualified professional be completed. It will be the responsibility of the authorized agent/owner to pay for and complete this survey and/or report. Where an external

consultant is required to provide peer review for these studies, the applicant will be responsible for this cost.

- It is the responsibility of the authorized agent/owner to provide written authorization/consent from the respective municipality in which the proposed fill site is located regarding their approval of the large fill site, prior to permit issuance. Municipal partner agencies may be concerned with one or more of the following:

    a) Oak Ridges Moraine Conservation Plan, Greenbelt Plan, Official Plan and zoning;
    b) Condition of municipal roadways and site entrance;
    c) Haul route from fill removal location to proposed fill site location;
    d) Mud mat, dust control schematics from fill site and removal location;
    e) Noise;
    f) Timing.

  Where fill is being imported from one municipality to another, it will be the responsibility of the authorized agent/owner to provide written authorization/consent from both municipalities.

2. Where proposed fill site locations are subject to Conservation Authority Ontario Regulation 172/06 and municipal fill bylaws under the *Municipal Act*, the proponents' authorized agent/owner shall prepare comprehensive and integrated plans/reports for both the NVCA and the municipality. In addition to NVCA and municipal approvals, the subject property may fall within the jurisdiction of the Niagara Escarpment Commission (NEC). In such cases, the approval of the NEC is required prior to the issuance of the NVCA permit or municipal approvals.

3. To avoid spring freshet, runoff, erosion and sedimentation, written permission from the Authority approving a large fill operation will be granted for 1 year but will only be valid from May 1st to November 30th. Only one active NVCA permit for fill placement per municipal address can exist at any one time.

4. That the permit holder/agent is required to maintain a daily summary log for loads shipped to the site, including:

    - Date;
    - Daily total # of trucks entering the site;
    - The location from where the fill was loaded into each truck.

   These records are to be retained and made available to NVCA staff on a monthly basis.

5. That the site be gated and signs be posted prohibiting access to unauthorized personnel/trucks.

6. Once a permit has expired, a new application for development can be submitted on sites where fill has previously been approved and placed. The

new application will be subject to the requirements and stipulations of this procedural guideline. NVCA acknowledges the cumulative impact of filling. NVCA staff will take into account previous filling activities on the site. The fee will be attributed to the total cumulative amount of filling on the site.

7. Following the issuance of a permit from the Authority, NVCA regulations staff will conduct routine site inspections of the large fill sites in order to ensure compliance with permit conditions. It will be the responsibility of the authorized agent/owner to ensure that a final inspection with Authority staff is coordinated. A final site inspection and review of the permit conditions shall be completed prior to the expiration date on the permit.

8. Any application to place large quantities of fill must be accompanied by the applicable fees as shown on the Planning and Development Fee Policy, as approved by the NVCA Board of Directors.

Site Design Guidelines

1. No fill shall be placed on native topsoil. Fill areas shall be stripped of topsoil to be stockpiled at locations noted on the site plan. This stripped top soil is to be placed back on the site to facilitate revegetation.
2. All stockpiles shall be located at the furthest distance possible from any natural feature including floodplain, watercourses, wetlands, top of bank or stable slope line.
3. Stockpiles that will remain in place for more than 30 days shall be stabilized by vegetative cover, erosion mats or other means. Stockpiles that will be in existence for less than 30 days shall be controlled by heavy duty sediment fence installed around the perimeter of the pile.
4. All disturbed ground left inactive for more than 30 days shall be stabilized by seeding, covering or equivalent control measures.
5. All natural areas shall be protected from sediment deposits using appropriate control measures.
6. Runoff from adjacent areas passing through the site shall be diverted around disturbed areas. This does not include natural watercourse diversions.
7. Fill should be identified as clean and inert as per Ministry of Environment Guidelines and be appropriate for the prescribed and future land use.
8. Preferred haul routes should be indicated on the plan.

General Permit Conditions

1. That all sediment and erosion controls will be in place prior to placement of fill.
2. That the sediment and erosion controls will be monitored and repaired as necessary and/or improved as per direction of Authority Staff.
3. That the fill operation will be completed in adherence with the approved plans submitted in support of the application.
4. That a post-development plan (as built) will be prepared by a certified Ontario Land Surveyor.
5. That a report from a qualified professional be provided confirming the total volume placed at completion of the works and final grades. This will be completed prior to the expiry of the permit and provided to the Authority.

6. That testing of the fill and/or surface water and/or groundwater occurs to ensure the material is in accordance with Ministry of the Environment guidelines and that these records be provided to NVCA staff.
7. Once the final as-built survey is received and quantities verified, if the final total quantity exceeds the permitted volume, a decision will be made as to whether this additional volume has had or potentially will have any potential adverse impacts. If it is deemed that the additional volume has not or will not have any adverse impacts the applicant/owner will be notified and appropriate fees adjustment will be required before the permit is deemed complete. If it is deemed that the additional volume has or could have an adverse impact, a violation and/or charges may be imposed and NVCA will require that some or all of the excess fill be removed.

Fee Schedule - Fill Placement

The fee schedule has been developed in an effort to ensure the cost recovery of Authority staff time and resources for these applications given the comprehensive review and monitoring that is required. The fee structure is as follows:

Volume of fill (m^3)	Fee ($)
250 m^3 – 1000 m^3	$520 PLUS 80 cents per m^3
1000 m^3 or greater	$1560 PLUS 80 cents per m^3

NOTE: Fees do not include the costs associated with any special studies or plans and external peer review that may be required to complete the review of conditions associated with the permit. All costs are the responsibility of the owner/applicant.

An application will not be deemed complete until all information has been submitted in support of the application. If information is missing from the application submission, it will be the responsibility of the authorized agent/owner to ensure that the information is provided.